

# How to Fix a Balky Garage Door

## *A Spray Gun for Oiling Hard-to-Reach Places—And Other Helpful Suggestions for the Automobile Owner*

**W**HEN the runway to the garage is practically on a level with the garage floor, even a light fall of snow will interfere with opening the doors the full distance necessary to allow the car to drive out of the garage. Furthermore, if the approach to the garage is of concrete and the clearance is small, water getting under the concrete will freeze and lift it enough to jam against the bottom of the doors.

The illustration of Figure 1 shows one remedy. The bottom of the door is sawed off and replaced with a hinged section which can be turned up to give the door several inches clearance. If the door rests against a sill which extends across the front of the garage it will be necessary to make the hinged portion open outward, in which case the snow and ice will have to be shoveled away for an inch or two in front of the doors to permit the folding up of the lower portion, as shown.

The diagram of Figure 1 shows another method of solving the problem by replacing the lower portion of the door with a double hinged section which can be

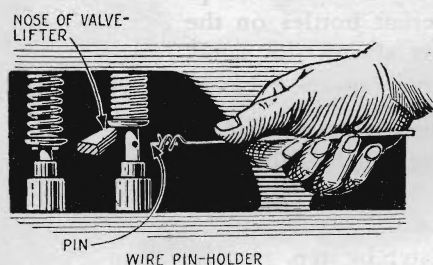


Fig. 2. Replacing a valve pin with the aid of an ingenious holder made of looped iron wire.

folded straight up. This avoids all trouble with ice or packed snow unless, of course, the snow is piled higher than the top hinge.

### **Simple Holder for Valve Pin**

**M**ANY jobs around an automobile are hard to do, not because they are inherently difficult from a mechanical standpoint, but because space is so limited that the hand cannot properly approach the work.

One operation of this sort is that of replacing the valve pin after the valves have been ground. With some types of valve lifters it is very difficult to hold the pin between the fingers and get it in the



Fig. 1. A hinged section at the bottom of the door assures clearance in winter. Right: Diagram showing double hinge.

hole in the valve stem. Frequently part of the manifold or some other portion of the motor interferes with the hand. Figure 2 shows a simple remedy. Wind a wire pin-holder of iron wire. Make the loops in the end of the wire just tight enough to properly guide the pin and loose enough so that the holder can be withdrawn, leaving the pin in the hole in the valve stem. The pin will stay in the hole and pull out of the pin-holder if the holder is moved sidewise to cramp the pin in the hole.

### **Handy Squirt Lubricator**

**T**HE harder it is to get at a bearing to lubricate it the more likely is the lubrication to be neglected. While the modern automobile is so constructed that lubrication is as easy as possible, there are many places that still are

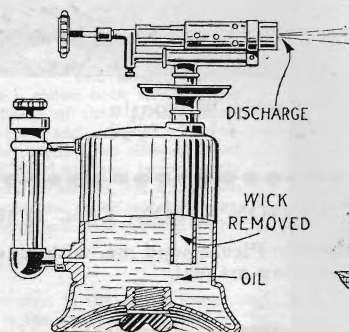


Fig. 3. An old plumbers' torch converted into a spray gun for oiling places hard to reach.

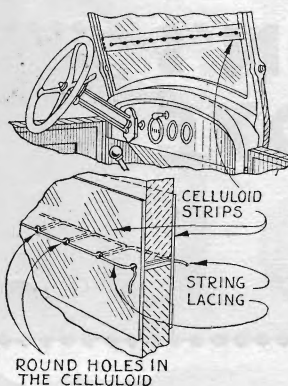


Fig. 4. Right: How to replace the rubber strip across the windshield with celluloid.

hard to reach, such as the clevis joints in the brake mechanism.

Few people like to crawl under a car just to squirt a drop of oil or two from an oil can on a clevis joint. Figure 3 shows how to avoid this trouble. Secure an old discarded plumbers' torch and remove the wick. Fill it with a mixture of light lubricating oil to which a small percentage of kerosene has been added. You will find that if you pump up a good pressure you can, with this outfit, squirt a fine stream of oil as far as fifteen feet. A little

"target practice" at the clevis joints and springs will materially reduce the wear and consequent rattle at these points. Squirted oil along the edges of the spring leaves is easy, and adequately lubricates the spring.

### **Windshield Gap Closer**

**M**ANY open cars are so constructed that the windshield is in two sections. Usually a rubber strip is supplied to

fit in between the two sections to keep out the rain. This strip, while effective in keeping out the rain, does not improve the car's appearance and is a disturbing black line across the line of vision.

An effective solution of the problem is shown in Figure 4. Two strips of transparent celluloid, in length equal to the width of the windshield, are perforated along their center lines with a series of holes. They should be laced in place as shown in Figure 4, pulling the lacing sufficiently tight to keep the celluloid flat against the glass.

### **\$10 for an Idea**

**E**ACH month POPULAR SCIENCE MONTHLY awards a prize of \$10, in addition to regular space rates, for the best idea sent in for motorists. The winner of this month's prize is D. L. Siverd, of Commodore, Pa., who suggested the garage door clearance device in Figure 1. Other contributions published are paid for at the usual rates.